

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1.-7. (canceled)

8. (currently amended) An information recording apparatus which irradiates a laser light on a recording medium and forms a recording mark corresponding to a recording signal, comprising:

a light source which emits the laser light; and

a signal generating unit which generates a recording pulse signal driving the light source based on the recording signal,

wherein the recording pulse signal has a mark period for forming the recording mark and a space period for forming no recording mark,

wherein when the space period is equal to or smaller than a predetermined length, the space period includes an off pulse period during its entire period, the off pulse period having a level lower than a bias power level, and

wherein when the space period is larger than the predetermined length, the space period includes the off pulse period at a back end portion, which is positioned immediately

before the mark period subsequent to the space period larger than the predetermined length

~~wherein the recording pulse signal has off levels lower than a bias power level in an entire space period equal to or smaller than a predetermined length and a part of a space period larger than the predetermined length, and~~

~~wherein the recording pulse signal has the off level immediately before a mark period subsequent to the space period larger than the predetermined length.~~

9. (currently amended) The information recording apparatus according to claim 8, wherein the ~~recording pulse signal has~~ space period larger than the predetermined length includes the off level pulse period at a front end portion of the space period larger than the predetermined length.

10. (previously presented) The information recording apparatus according to claim 8, wherein the predetermined length is a shortest space length.

11. (currently amended) The information recording apparatus according to claim 8, wherein the level of the off pulse period level is a level at which the laser pulse is not emitted from the light source.

12. (previously presented) The information recording apparatus according to claim 8, wherein a front end portion of the mark period subsequent to the space period equal to or smaller than the predetermined length is located behind a front end portion of the mark period subsequent to the space period larger than the predetermined length for each mark period of a same length.

13. (currently amended) An information recording method which irradiates a laser light on a recording medium and forms a recording mark corresponding to a recording signal, comprising:

a signal generation process which generates a recording pulse signal based on the recording signal; and

an irradiation process which irradiates a laser pulse on the recording medium based on the recording pulse signal,

wherein the recording pulse signal has a mark period for forming the recording mark and a space period for forming no recording mark,

wherein when the recording pulse signal has off levels lower than a bias power level in an entire space period is equal to or smaller than a predetermined length and a part of a space period larger than the predetermined length the space period includes an off pulse period during its entire period, the off pulse period having a level lower than a bias power level, and

wherein when the ~~recording pulse signal has the off~~
~~level immediately before a mark period subsequent to the space~~
period is larger than the predetermined length the space period
includes the off pulse period at a back end portion, which is
positioned immediately before the mark period subsequent to the
space period larger than the predetermined length.

14. (new) The information recording apparatus according to claim 8, wherein the predetermined length is one of $3T$ and $4T$.

15. (new) The information recording method according to claim 13, wherein the predetermined length is one of $3T$ and $4T$.